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MARSHALL, GERSTEIN & BORUN LLP (FISHER)			EXAMINER	
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CHICAGO, IL 60606			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

## Application No.

10/589,728

## Applicant(s)

KAVAKLIOGLU, KADIR

## Examiner

JOHN H. LE

## Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1.5-41, 43, 44, 47, 48, 51-53 and 70-76 is/are pending in the application.
- 4a) Of the above claim(s) 2-4, 42, 45, 46, 49, 50 and 54-69 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1.5-41, 43, 44, 47, 48, 51-53 and 70-76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. This office action is in response to applicant's amendment received on 08/21/2009.

Claims 1, 5-7, 39, 41, 43-44, 47-48, 51 have been amended.

Claims 2-4, 42, 45-46, 49-50, and 54-69 have been cancelled.

Claims 70-76 have been add.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 39 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 39 recites the limitation "the received process parameter measurements" in line 6. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 5-41, 43-44, 47-48, 51-53, and 70-76 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims are directed to a judicial exception; as such, pursuant to the Interim Guidelines on Patent Eligible Subject Matter (MPEP 2106), a method claim must meet a specialized, limited meaning to qualify as a patent-eligible process claim. As clarified in *Bilski*, the test for a method claim is whether the claimed method is (1) tied to particular machine or apparatus, or (2) transforms a particular article to a different state or thing. The claims fail to include transforms a particular article to a different state or thing or tied to particular machine or apparatus. Therefore, claim(s) 1, 5-41, 43-44, 47-48, 51-53, and 70-76 appear(s) non-statutory.

For example:

Claim 1, line 11, "determining" should change to --using a processor for determining-- that is tied to particular machine or apparatus.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 39-41, 72 are rejected under 35 U.S.C. 102(b) as being anticipated by Daw et al. (USP 6,901,351).

Regarding claim 39, Daw et al. disclose method of detecting an abnormal situation in a fluid catalytic cracker (e.g. Col.9, lines 37-52), comprising: receiving measurements of a differential pressure between two locations (sensor 4 may be

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pressure transducers 60) in the fluid catalytic cracker (e.g. Fig.6, Col.18, lines 9-14) ; the computer 6 analyzes the sensor data, the analysis involving standard statistics (e.g. range, variance, standard deviation, skewness, rms, kurtosis...etc.) and determining a statistical measure of the differential pressure between two locations (sensor 4 may be pressure transducers 60) in the fluid catalytic cracker (e.g. Fig.6, Col.18, lines 9-14) from the process parameter measurements (see Col. 9, lines 46-67);comparing the statistical measure of the process parameter to a baseline value; and the computer 6 detecting the existence of an abnormal situation based on the comparison of the statistical measure of the process parameter to the baseline value (e.g. Fig.3, Col.10, lines 22-45).

Regarding claim 40, Daw et al. disclose determining the baseline value as a predetermined value (e.g. Col.19, lines 1-11).

Regarding claim 41, Daw et al. disclose determining the baseline value as a statistical measure of a first set of the measurements of the process parameter (e.g. Col.19, lines 1-11).

Regarding claim 72, Daw et al. disclose method of detecting an abnormal situation in a fluid catalytic cracker (e.g. Col.9, lines 37-52), comprising: receiving measurements of a temperature parameter in the fluid catalytic cracker (e.g. Col.17, line 64-Col.8, line 4); the computer 6 analyzes the sensor data, the analysis involving and determining a means value of the temperature parameter from the temperature parameter measurements (see Col. 9, lines 46-67); comparing the means value of the temperature parameter to a baseline value; and the computer 6 detecting the existence of an abnormal situation based on

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the comparison of the means value of the temperature parameter to the baseline value (e.g. Fig.3, Col.10, lines 22-45).

8. Claims 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Ford et al. (USP 7,181,654)

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 39, Ford et al. disclose method of detecting an abnormal situation in a fluid catalytic cracker (e.g. Col.9, lines 37-52), comprising: receiving measurements of a differential pressure between two locations (e.g. Col.6, lines 49-55) in the fluid catalytic cracker (agitator 30) (e.g. Col.9, lines 37-52, Col.10, line10-12); determining a statistical measure of the differential pressure between two locations in the fluid catalytic cracker from the process parameter measurements (e.g. Col.10, lines 10-41); comparing the statistical measure of the process parameter to a baseline value (e.g. Col.12, lines 35-52); and detecting the existence of an abnormal situation based on the comparison of the statistical measure of the process parameter to the baseline value (e.g. Col.13, lines 30-53).

***Allowable Subject Matter***

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9. Claims 1, 5-38, 51-53, 70-71, 73, 74-76 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action.

10. Claims 43-44, 47-48 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

#### ***Response to Arguments***

11. The amendment of claims 39 and 72 are not include all of the limitations of the base claim and any intervening claims necessitated the new ground(s) of rejection presented in this Office action.

#### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

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calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN H. LE whose telephone number is (571) 272-2275. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A. Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John H Le/  
Primary Examiner, Art Unit 2863  
October 21, 2009